

VI. Remarks.

The Examiner entered the following rejections.

1. Claims 1-4, 8-12, and 14-39 are rejected under 35 USC 102(b) as being anticipated by Hayakawa et al (US, 4,478,595).

As to amended claim 1, Hayakawa does not teach an accessory connected to a pivotal frame. Hayakawa teaches an accessory, namely an alternator (5a) which is mounted to an engine, col. 3, lines 46-52. Hayakawa does not teach that alternator (5a) is moveably mounted to the engine on a pivotal frame. The inventive system distinguishes over the art by eliminating the need for the separate tensioner (1) of Hayakawa by combining the belt tension adjustment feature with an accessory, namely, the alternator. Further, Hayakawa does not teach sensing a drive member tension. Instead, Hayakawa only teaches calculating a tensioning force T by sensing a displacement (X), col. 5, lines 54-68. Hence, the belt tension in Hayakawa is mathematically derived based on certain assumptions included the spring constant (K) and initial strain (X_0) of the spring (36).

On the other hand the belt tension force is directly sensed in the instant invention. Direct sensing of the belt tension force eliminates errors that might otherwise be introduced based on the foregoing assumptions used in Hayakawa.

Although Kraft (US 4,355,991) teaches an accessory (7) on a pivot (13), Kraft does not teach control of a drive member tension using signals from sensors. Instead, Kraft only teaches ratcheted increases of belt tension, see Abstract.

Neither reference teaches use of sensor signals to control a pivoted frame position to adjust a belt tension.

Claims 8-12 and 14-32 are cancelled without prejudice or disclaimer of subject matter.

As to claim 33, Hayakawa does not teach all of the claim limitations arranged as in the claim. Hayakawa does not teach adjusting a belt tension by pivotally moving the first accessory. As noted above Hayakawa only teaches adjustment of a belt tensioner by measuring a linear displacement (X) of an idler pulley.

Further, neither Hayakawa nor Kraft teaches a first accessory hubload and a second accessory hubload used to calculate a first accessory belt slackside tension. Hayakawa only teaches a single tensioner having an idler (20) in contact with a belt, col. 3, line 62 to col. 4, lines 39. Further, Hayakawa only uses a displacement sensor (38), which displacement is then used to calculate an idler pulley bearing load H , col. 5, line 49-68. No direct load detecting sensor is taught.

Claims 34-39 depend directly or ultimately from claim 33.

2. Claim 5-7 and 13 are rejected under 35 USC 103(a) as being unpatentable over Hayakawa et al in view of Koumo et al (US 5,085,104).

Claims 5-7 depend from claim 1.

Claim 13 is cancelled without prejudice or disclaimer of subject matter.

V. New Claims.

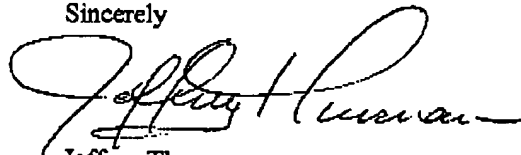
None of the references teaches all of the limitations in new claims 41-43, namely, use of load sensor signals to calculate a desired alternator hubload using the claimed equations.

VI. Fees

Any fees applicable to this amendment should be deducted from deposit account 07-0475 in the name of the Gates Corporation.

Thank you for your attention to this case.

Sincerely



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